EXHIBIT 1

UNREDACTED VERSION OF DOCUMENT(S) SOUGHT TO BE SEALED

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10	UNITED STATES DISTRICT COURT					
11	NORTHERN DISTR	ICT OF CALIFORNIA				
12	SAN FRANCI	SCO DIVISION				
13	WAYMO LLC	Case No. 17-cv-00939-JCS				
14	Plaintiffs,	PLAINTIFF'S FIRST SUPPLEMENTAL				
15	v.	OBJECTIONS AND RESPONSES TO OTTO TRUCKING, LLC'S FIRST SET OF				
16	UBER TECHNOLOGIES, INC.;	INTERROGATORIES (NOS. 1-14)				
17	OTTOMOTTO, LLC; OTTO TRUCKING LLC,					
18	Defendants.					
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	WAYMO'S FIRST SUPP. OBJECTIONS AND RESPONSES	No. 3:17-cv-00939-WHA 5 TO OT'S FIRST SET OF INTERROGATORIES (Nos. 1-14)				
- 1	WATMO STIKST SUPP. OBJECTIONS AND RESPONSES TO OT STIKST SET OF INTERROGATORIES (NOS. 1-14)					

INTERROGATORY NO. 10:

Identify all damage, including a specific calculation of monetary damages, caused by any alleged misappropriation of trade secrets by Otto Trucking.

RESPONSE TO INTERROGATORY NO. 10:

Waymo incorporates by reference its General Objections. Waymo further objects to this interrogatory on the grounds that it is vague and ambiguous, including with respect to the phrase "all damage." Waymo further objects to this request to the extent it is compound, complex, and contains multiple subparts. Waymo further objects to this interrogatory as premature to the extent it calls for information that is subject to expert testimony. Waymo will provide expert testimony in accordance with the Court's procedural schedule.

Subject to and without waiving the foregoing General and Specific Objections, Waymo responds as follows:

Waymo believes it has suffered and is suffering irreparable harm as a result of Otto Trucking's trade secret misappropriation. In addition, Waymo believes it is entitled to damages for Otto Trucking's trade secret misappropriation, particularly to the extent Otto Trucking has used Waymo's trade secrets to fast-track LiDAR development for its own benefit or for the benefit of Ottomotto or Uber. Waymo is continuing its discovery into the nature and extent of Otto Trucking's use of Waymo's trade secrets for its benefit, for the benefit of Ottomotto, and/or for the benefit of Uber. Waymo is also continuing its discovery into the role of Otto Trucking vis-à-vis Ottomotto and Uber as a conduit of misappropriated information from Mr. Levandowski and Ottomotto/Uber. A specific calculation of monetary damages caused by Otto Trucking's misappropriation cannot be provided until this discovery is more substantially complete.

Waymo expects to calculate past damages based on lost profits, unjust enrichment, and reasonable royalty metrics. To the extent an injunction is not granted, Waymo will also seek damages, based on these same metrics, tied to any continuing use of Waymo's trade secrets.

Inputs to Waymo's damages analysis vis-à-vis Otto Trucking include, for example: the extent, duration, and purpose of trade secret misappropriation; estimates of future profits and cash

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flows to be earned by Otto Trucking (or those benefiting from its trade secret misappropriation) and Waymo; assessments and projections regarding the relevant markets, competition therein, and the relevant parties' competitive positions; investment in LiDAR technology (in time, capital, engineering costs, and other expenditures); and valuations of the relevant technology. Discovery on these subjects is ongoing.

Waymo further seeks a judgment that this case is exceptional and an award of Waymo's costs and reasonable attorneys' fees. Waymo also seeks an accounting of all sales and revenues, together with pre-judgment and post-judgment interest. Waymo further seeks enhanced damages for Defendants' willful and malicious conduct in misappropriating Waymo's trade secrets, punitive damages, and other relief including but not limited to disgorgement of profits from unjust enrichment. Waymo seeks any other relief available under applicable law. It would be premature to estimate the amount of damages at this time.

Discovery is ongoing and Waymo reserves the right to supplement – and anticipates regularly supplementing – this response after further discovery and investigation into Otto Trucking's misappropriation of Waymo's trade secrets and the benefits obtained by Defendants as a result of that misappropriation.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 10:

Waymo objects to this interrogatory on the grounds that it is vague and ambiguous, including with respect to the phrase "all damage." Waymo further objects to this interrogatory to the extent it is compound, complex, and contains multiple subparts. Waymo further objects to this interrogatory as premature to the extent it calls for information that is subject to expert testimony. Waymo will provide expert testimony in accordance with the Court's procedural schedule.

Subject to and without waiving the foregoing objections, Waymo responds as follows:

Waymo's technical expert is continuing to assess Defendants' use of Waymo's trade secrets; such assessments will ultimately inform the damages analysis in this case. Moreover, Defendants have not yet responded to Waymo's damages-related discovery requests. Therefore,

Waymo's expert has not concluded his analysis and is not expected to do so until the time that expert reports are due on August 24, 2017.

Discovery in this case is ongoing, and Waymo is still waiting for substantive responses to its Fourth Set of Requests for Production (Nos. 266-297) and First Set of Common and Specific Interrogatories, all of which relate to damages. Specifically, Waymo expects Defendants' responses to the following document requests and interrogatories to inform its response to this interrogatory, and Waymo expects to supplement its response to this interrogatory when it receives Defendants' document production and interrogatory responses:

- DOCUMENTS sufficient to show UBER's market capitalization and internal valuation of itself on a quarterly basis, from the year prior to the year in which UBER first contemplated developing autonomous vehicles through the present.
- DOCUMENTS sufficient to show the impact of developing autonomous vehicles on Uber's internal valuation of itself from the year prior to the year in which UBER first contemplated developing autonomous vehicles through the present.
- DOCUMENTS describing UBER's development of autonomous vehicles as necessary to the continued viability of UBER or to the continued viability of any aspect of UBER's business, INCLUDING but not limited to characterizations of a competitor's development or deployment of autonomous vehicles as an existential threat to UBER.
- DOCUMENTS sufficient to show each iteration of DEFENDANTS' plan to launch any autonomous vehicles in any geographic region from the time DEFENDANTS first contemplated developing or deploying autonomous vehicles to the present.
- DOCUMENTS sufficient to show DEFENDANTS' estimates of the size of the ridesharing market and DEFENDANTS' share of that market in the United States for each of the last six years on a quarterly basis. To the extent DEFENDANTS break out such estimates by geography (region, city, etc.), those estimates should also be provided.
- DOCUMENTS sufficient to show DEFENDANTS' forecasts of the size of the ride-sharing market, the percentage of the ride-sharing market that will be serviced by autonomous vehicles, and DEFENDANTS' share of that market in the United States (by autonomous vehicles and vehicles driven by contractors) for any period of time forecasted by UBER, on a quarterly basis. To the extent DEFENDANTS break out such estimates by geography (country, region, city, etc.), those estimates should also be provided. To the extent DEFENDANTS create different forecasts based on different assumptions, documents REGARDING each forecast with documents sufficient to show the assumptions for each should be provided.

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- DOCUMENTS sufficient to show DEFENDANTS' forecasts REGARDING the number of DEFENDANTS' ride-sharing vehicles in the United States (by autonomous vehicles and vehicles driven by contractors), for any period of time forecasted by UBER —broken out by on a quarterly basis. To the extent DEFENDANTS break out such estimates by geography (country, region, city, etc.), those estimates should also be provided. To the extent DEFENDANTS create different forecasts based on different assumptions, documents REGARDING each forecast with documents sufficient to show the assumptions for each should be provided.
- DOCUMENTS sufficient to show DEFENDANTS' business plans, strategic plans, operating plans, marketing plans, financial plans, sales plans, and investment plans for its ridesharing business, INCLUDING projections for revenue generation and profitability.
- DOCUMENTS sufficient to show DEFENDANTS' business plans, strategic plans, operating plans, marketing plans, financial plans, sales plans, and investment plans for its autonomous vehicle program, INCLUDING projections for revenue generation and profitability of the autonomous vehicle program.
- DOCUMENTS sufficient to show DEFENDANTS' analysis of any barriers to entry in the ride-sharing market and the status of any attempts by DEFENDANTS to enforce such barriers against competitors INCLUDING WAYMO, INCLUDING investments and infrastructure needed.
- DOCUMENTS REGARDING DEFENDANTS' discussion of WAYMO or its business, INCLUDING DEFENDANTS' analysis of WAYMO's impact or potential impact on the ridesharing market or on UBER.
- DOCUMENTS sufficient to identify the date that UBER first considered deploying autonomous vehicles.
- DOCUMENTS sufficient to identify the date that UBER first considered developing its own autonomous vehicles.
- DOCUMENTS sufficient to identify the date that UBER first considered developing its own in-house LiDAR.
- DOCUMENTS REGARDING the importance of a first-mover advantage in commercializing autonomous vehicles, INCLUDING any estimates of the market shares of other entrants that are not first to market.
- DOCUMENTS REGARDING the importance of LiDAR, INCLUDING the importance of low-cost LiDAR, to DEFENDANTS' ability to compete.

- DOCUMENTS REGARDING the relative value of safety (vis-à-vis, for example, cost and timing of entry into relevant markets) in the commercialization of autonomous vehicles.
- DOCUMENTS sufficient to show DEFENDANTS' analysis of WAYMO's technological lead REGARDING autonomous vehicle technology (INCLUDING DEFENDANTS' estimates of the time, personnel, and investment needed to close the gap between DEFENDANTS and WAYMO), and documents sufficient to show how DEFENDANTS' analysis or estimates have changed over time.
- DOCUMENTS sufficient to show DEFENDANTS' analysis of how WAYMO's technological lead over DEFENDANTS REGARDING autonomous vehicle technology (INCLUDING DEFENDANTS' estimates of the time, personnel, and investment needed to close the gap between DEFENDANTS and WAYMO) changed after Uber's acquisition of OTTOMOTTO and OTTO TRUCKING.
- DOCUMENTS sufficient to show DEFENDANTS' analysis of WAYMO's REGARDING LiDAR technology (INCLUDING technological lead DEFENDANTS' estimates of the time, personnel, and investment needed to close the gap between DEFENDANTS and WAYMO), and documents sufficient to show how DEFENDANTS' analysis or estimates have changed over time.
- DOCUMENTS sufficient to show DEFENDANTS' analysis of how WAYMO's technological lead over DEFENDANTS REGARDING LiDAR technology (INCLUDING DEFENDANTS' estimates of the time, personnel, and investment needed to close the gap between DEFENDANTS and WAYMO) changed after UBER's acquisition of OTTOMOTTO and OTTO TRUCKING.
- DOCUMENTS sufficient to show DEFENDANTS' comparisons of the cost and profitability of a human-driven versus an autonomous vehicle in a ride-sharing fleet.
- DOCUMENTS sufficient to show the historical and current cost of DEFENDANTS' autonomous vehicles, broken down by component, and dating back to the inception of DEFENDANTS' autonomous vehicle program. As noted in the Instructions above, to the extent DEFENDANTS can provide separate information for each Defendant, DEFENDANTS should do so.
- DOCUMENTS sufficient to show DEFENDANTS' total financial investment including but not limited to employee time, purchase of capital equipment, and outside consultants, by quarter, into its efforts to develop in-house LiDAR. As noted in the Instructions above, to the extent DEFENDANTS can provide separate information for each Defendant, DEFENDANTS should do so.
- DOCUMENTS sufficient to show DEFENDANTS' investment, in terms of time including but not limited to engineers, software developers, managers, and executives (broken out be each category of employee), into its efforts to develop inhouse LiDAR. As noted in the Instructions above, to the extent DEFENDANTS

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can provide separate information for each Defendant, DEFENDANTS should do so.

- Patent licenses or agreements relating to LiDAR.
- DOCUMENTS sufficient to show the impact to DEFENDANTS of having to redesign Fuji to avoid using the trade secrets identified in response to UBER's interrogatory No. 1.
- DOCUMENTS sufficient to show any valuation (whether conducted by UBER or by a third party) of the assets and technology acquired in the acquisition of Otto by Uber, INCLUDING valuations performed for the purpose of purchase price accounting or any other purpose.
- DOCUMENTS sufficient to show any DEFENDANTS' projected revenue, gross margin, and operating profit for any division including autonomous vehicles.
- DOCUMENTS sufficient to show any the financials, INCLUDING profit and loss statements and balance sheet, for OTTOMOTTO, OTTO TRUCKING, and any division of UBER including autonomous vehicles.
- DOCUMENTS sufficient to show DEFENDANTS' approved requests for capital expenditure authorizations related to its autonomous vehicle program, INCLUDING R&D expenditures, technology/equipment acquisitions, and marketing expenditures.
- Describe in detail the impact, including financial impact, to DEFENDANTS of having to redesign Fuji to avoid using the trade secrets identified in response to UBER's Interrogatory No. 1.
- To the extent DEFENDANTS contend they will be irreparably harmed by a permanent injunction prohibiting the use of WAYMO's trade secrets in this case, describe in detail the factual and legal bases for that contention.
- Describe in detail DEFENDANTS' investment in developing in-house LiDAR. This should include DEFENDANTS' financial investment, as well as DEFENDANTS' investment in terms of time and personnel.
- Describe in detail [OTTOMOTTO and OTTO TRUCKING's] efforts to place a value on OTTOMOTTO and/or OTTO TRUCKING or their respective assets and technology as part of UBER'S acquisition of OTTOMOTTO and/or OTTO TRUCKING, either prior to or following the acquisition.
- Describe in detail UBER's efforts to place a value on OTTOMOTTO and/or OTTO TRUCKING or their respective assets and technology as part of the acquisition, either prior to or following the acquisition, including but not limited to the efforts described by Nina Qi during her deposition at Rough Tr. 192:4-199:15.

• IDENTIFY the date that UBER first considered developing its own in-house LiDAR and the date UBER began developing its own in-house LiDAR (to the extent it differs from the date UBER began considering it), and describe in detail UBER's reasons for wanting to develop its own in-house LiDAR.

Damages for Violations of Defense of Trade Secrets Act and California Uniform Trade Secret Act

Uber, Ottomotto, and Otto Trucking are jointly and severally liable for damages in this case. Ottomotto and Otto Trucking are the corporate vehicles for the misappropriation of Waymo's trade secrets for the benefit of Uber. Anthony Levandowski officially formed Ottomotto on January 15, 2016 (while he was simultaneously employed by Waymo, consulting with Uber on Uber's self-driving car project, and negotiating the acquisition of Ottomotto). He officially formed Otto Trucking on February 1, 2016 (five days after resigning from Waymo and while he was consulting with Uber on Uber's self-driving car project and negotiating the acquisition of Otto Trucking). Mr. Levandowski was acting for all three Defendants at various times in order to facilitate the misappropriation of Waymo's trade secrets.

Uber entered into Agreements and Plans of Merger with each of Ottomotto and Otto Trucking on the same date, within weeks of the formation of those entities. (UBER00016757; UBER00016453). Pursuant to its Agreement and Plan of Merger, Otto Trucking was obligated and continues to be obligated to assign all of its intellectual property to Ottomotto (which has now been acquired by Uber). (UBER00016757.) Pending completion of the Otto Trucking acquisition by Uber, Anthony Levandowski remains one of two managing members of Otto Trucking and holds

(OTTOTRUCKING00000004.) Uber has an exclusive option to acquire Otto Trucking between August 31, 2017 and November 30, 2017. (UBER00016757 at -764, -819.) If Uber does not acquire Otto Trucking during that period, Uber will be obligated to (i) become a 50% owner in Otto Trucking and (ii) to license Uber's self-driving technology (including all trade secrets) exclusively to Otto Trucking (even vis-à-vis Uber) for use in the commercialization of self-driving trucks. (UBER00016757 at -772.)

Otto Trucking is jointly and severally liable for all damages caused by Defendants' misappropriation of Waymo's trade secrets, including Defendants' unjust enrichment resulting from Defendants' misappropriation, any reasonable royalty assessed as a result of Defendants' misappropriation, and any exemplary damages, attorneys' fees, expert fees, and costs awarded as a result of Defendants' misappropriation.

Unjust Enrichment Damages

Uber, Ottomotto, and Otto Trucking have been unjustly enriched due to their misappropriation of Waymo's trade secrets. There are several measures that can be used to quantify the unjust enrichment to Defendants. One measure of the unjust enrichment to Defendants is the value that was paid (or will be paid) by Uber for Ottomotto and Otto Trucking (collectively, "Otto"). When Uber began negotiating with Mr. Levandowski, Otto was a company that did not exist, and did not have any products. (Qi Tr. 146:8-18.) And at that time, Uber was aware that he still had confidential information from Waymo. (Bares Tr. at 179:14-18.) John Bares, Operations Director in Uber's Advanced Technology Group, was personally responsible for negotiating aspects of Uber's acquisition of Otto on Uber's behalf, including a series of technical milestones regarding LiDAR. He admitted that having access to Waymo's specifications for medium and long-range LiDAR would have been useful for someone trying to build medium and long-range LiDAR at Uber because Waymo is "eight years ahead" and "had custom lasers." (*Id.* 179:19-180:12.) Defendants do not dispute that Mr. Levandowski had access to Waymo's files at this time—as a result of both his ongoing employment at Waymo, and his illicit downloads.

Uber and Otto began negotiating the term sheet for the acquisition of Otto in January and February 2016, with the final term sheet executed on February 22, 2016. (UBER00017518-578; UBER00069043-064.) For at least some of this period, Mr. Levandowski was still an employee of Google. Because Otto had no products when Uber and Otto began negotiating (Qi Tr. 146:8-18), the only things of value to be acquired by Uber were likely (1) the engineers that Uber acquired; and (2) Waymo's technology. Therefore, the misappropriated trade secrets represented a significant portion of the assets acquired by Uber, as well as the talents of the employees that would be engaged in connection with the acquisition.

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Uber and Otto entered into the formal Agreement and Plan of Merger on April 11, 2016. (UBER00016453-16523; UBER00016757.) Prior to entering into the agreement, Uber's Board of Directors approved the acquisition. Discovery regarding Uber's internal valuation of Otto (including information regarding the assumptions underlying Uber's internal valuation of Otto) will further inform Waymo's unjust enrichment analysis. However, Nina Qi testified that Uber told its Board that the overall value of the deal at the time was about \$590 million. (Qi Tr. at 100-103.) Although Uber's payment to Otto was conditioned on certain milestones that stretched for some time into the future, this value is a reasonable measure of the present value of the transaction given that it was the value presented to Uber's Board of Directors in the Board's consideration and approval of the acquisition.

Another measure of the unjust enrichment to Defendants is the present value of the additional cash flows that Defendants will earn as a result of Uber's accelerated development of self-driving car technology. Uber expected that acquiring Otto would accelerate the development of its LiDAR technology. For example, when considering the acquisition, Uber estimated that acquiring Otto could shorten its autonomous vehicle timeline by one to two years. (UBER00069030-033 at '033.) Even under its "most conservative case," Uber estimated the increased present value of incremental profit (as measured by EBIT, or Earnings Before Interest and Taxes) from Otto's technology would be between \$836 million and \$1.69 billion. (UBER00069030-033 at '033.) In addition to the increased profits, Uber recognized Waymo was a threat to its entire existence, potentially placing its entire business at risk—something that, according to public reports, is worth approximately \$70 billion. (See https://techcrunch.com/2017/06/21/kalanick-is-out-but-ubers-vcs-royally-screwed-up-too-sayindustry-watchers/). For example, Uber's then-CEO was quoted as follows: "The minute it was clear to us that our friends in Mountain View were going to be getting in the ride sharing space, we needed to make sure there is an alternative [self-driving car]. Because if there is not, we're not going to have any business." He also described developing an autonomous vehicle as "basically existential for us." (UBER00006042-047 at '043; UBER00006035-041 at '037; UBER00064472-473; LEV 001940-051 at '940.) In messaging notes related to the acquisition, Uber's then-CEO

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noted "Autonomous transportation is very possibly a winner-take-all, and thus existential for					
Uber." (UBER00064468-469 at '468.) Similarly, Jeff Holden, Uber's Chief Product Officer,					
wrote: "This war for self-driving is truly existential for Uber: we'll either start up our second S					
curve of growth or we'll die. There might be in-between cases, but it's definitely easy to see how					
the extremes could play out." Discussing the competition with Google, Mr. Holden discusses the					
battle and the war: "The *battle* is about what we need to do to get ourselves into a sufficiently					
competitive position before December that G doesn't walk away with the crown for future of ride					
sharing. It's about establishing beach heads, being in the game in a credible way. The *war* is					
the long-term defeat of G and others so we afford ourselves the opportunity to extend our massive					
scale business into the future. This will be about who gets NSD self-driving to scale first."					
(UBER00070108-110 at '108.)					

Another measure of unjust enrichment to Defendants is the expected cost savings to Defendants from using Waymo's trade secrets in Uber's LiDAR systems. Waymo has obtained significant cost savings by developing custom, in-house LiDAR systems using its trade secrets. Waymo's custom, in-house solution is much cheaper than options offered by third party vendors; as explained in more detail in Waymo's response to Interrogatory No. 6, a mid-range LiDAR from Velodyne costs approximately \$70,000. Uber has also recently purchased third-party LiDAR units from (UBER00086529.) By contrast, the materials needed for Waymo's own mid-range GBr3 LiDAR system, which uses the trade secrets at issue in this case, cost just over \$5,000. (See Waymo's Response to Interrogatory No. 6 and all supplements thereto.)

Due to the misappropriation of Waymo's trade secrets, Defendants will likely benefit from many years of future cost savings due to employing Waymo's trade secrets in Uber's LiDAR systems. While considering the acquisition of Otto, Uber itself recognized the significant cost savings from building custom lasers, noting savings of "up to \$45M of one-time savings (@ 1,000 units)" and "up to \$80M per year of ongoing savings (@ 1,000 units)." (UBER00068983.) And it is clear that Uber is scaling production quickly: at the end of 2016, Uber estimated that it would need approximately 120,000 to 150,000 lenses for 2017 and 500,000 for 2018. (UBER00054959-

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962 at '959.) Since Uber's LiDAR system uses 64 lenses, these estimates indicate that Uber is planning to manufacture between 1,875 and 2,344 LiDAR systems in 2017, and 7,812 LiDAR systems in 2018.

Another measure of unjust enrichment to Defendants is the expected cost savings due to reduced development expenses from using Waymo's trade secrets in Uber's LiDAR systems. While considering the acquisition of Otto, Uber recognized one important benefit was that the acquisition "decreases investment Vehicle] development." total in Autonomous (UBER00068983) An internal Uber email estimates that Uber's acquisition of Otto saved Uber at least a year in the race to large scale autonomous vehicle deployment, and describes Uber's next best choice as building the team internally with a two to four year lag versus what the Otto team would bring. (UBER00060147-156 at '147.) One way to measure the costs that Defendants saved through their misappropriation of Waymo's trade secrets is by looking at the costs that Waymo incurred to develop those trade secrets. As discussed in Waymo's response to interrogatory 6, Waymo has incurred up to \$1.1 billion to develop the trade secrets. (See Waymo's 7/13 Supplemental Response to Interrogatory No. 6 and all supplements thereto.)

Waymo anticipates that Defendants will argue that the measures of unjust enrichment discussed above are measures of value for the entirety of the company (Otto) acquired by Uber. Waymo expects to rebut any evidence presented by Defendants that a portion of any value can be attributed to any contributions other than Waymo's trade secrets. Nonetheless, Waymo addresses apportionment below.

Otto had no products when Uber and Otto began negotiating. (Qi Tr. 146:8-18.) And Otto's profit and loss statement for January through March 2016 reflects less than \$1.4 million of expenses. (UBER00060164 and UBER00060165). Therefore, the only things of value to be acquired by Uber were likely (1) the engineers that Uber acquired; and (2) Waymo's technology. Waymo is still conducting discovery regarding what assets (if any) Otto had when Uber decided to acquire it. To the extent Otto had any working products or technology by the time Uber agreed to acquire it, Waymo's unjust enrichment analysis would account for that by deducting the value of Otto's then-existing technology. However, as previously discussed, Waymo expects the large

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majority of the measures of value discussed above to be attributable to the value of the stolen information and engineers that Uber acquired in the transaction.

With respect to the value of the engineers Uber acquired from Otto, talented engineers in the autonomous vehicle field are few and far between. In particular, some of the engineers who left Waymo to join Otto, and who were eventually acquired by Uber, had very specialized skill sets, including Don Burnette, Claire Delaunay, Gaetan Pennecot and Mr. Levandowski himself. These engineers would likely be worth more than an average engineer, and more than even an average autonomous vehicle engineer. Waymo is still obtaining discovery regarding Uber's valuation of the engineers that it acquired, but one public estimate of the value of engineers in the autonomous vehicle industry is \$10 million per engineer. (https://www.recode.net/2016/9/17/12943214/sebastian-thrun-self-driving-talent-pool).

With respect to development expenses, it is possible that Defendants would not have had to incur all of the development expenses Waymo incurred if Defendants had developed the trade secrets themselves (rather than misappropriating them from Waymo). Although Waymo is still seeking discovery on how long Uber spent in its autonomous vehicle development efforts before acquiring Otto, Waymo understands that Uber had been developing autonomous vehicle technology prior to its discussions with Otto. Uber may argue that in calculating Uber's unjust enrichment based on Waymo's development expenses, it may be appropriate to include only a portion of Waymo's total development expenses. To date, Defendants have not produced evidence regarding their LiDAR development efforts necessary to conduct such an apportionment. However, as discussed above, Uber believed that it could save development expenses by acquiring Otto. Specifically, Uber estimated that the acquisition would speed up its autonomous vehicle timeline by one to two years, and would speed up its laser development by two to four years. Thus, one estimate of the potential savings as a result of Defendants obtaining Waymo's technology is the one to two years of average development expense that Uber estimated it would save in developing autonomous vehicle technology, which can be expressed as a percentage of Uber's total development expenses. Another measure of the potential savings as a result of Defendants obtaining Waymo's technology is the difference between the amount of money

Waymo has spent in developing autonomous vehicle technology and the amount of money that Defendants have spent. Another measure of the potential savings can be calculated based on the proportion of development expenses that Waymo has spent in developing LiDAR technology in relation to the other technologies in autonomous vehicles. Waymo reserves its right to supplement this response if and when Defendants produce the information necessary to conduct an apportionment regarding development expenses.

In addition, if Uber is able to deploy autonomous vehicles in its fleet, its operational costs for its entire ridesharing business would likely drop substantially, in part because it would not have to share any revenue with its drivers.

Waymo is under a Court order to narrow its list of asserted trade secrets to less than ten by August 1. After Waymo completes this narrowing, Waymo will consider how to apportion the value of the trade secrets that Mr. Levandowski and Defendants misappropriated to account for the trade secrets that it will bring to trial in this case. However, Waymo suspects that a substantial portion of the unjust enrichment would be attributable to the most valuable trade secrets. Since Uber and Waymo are racing to commercialize autonomous vehicles, accelerating the development timeline was important to Uber. (UBER00070108-110 at '108.). Thus, Waymo presumes that Defendants made use of the most important and most valuable trade secrets first.

Reasonable Royalty Damages

If the Court were to determine that damages based on the unjust enrichment caused by Defendants' misappropriation of the trade secrets is not provable, the Court "may order payment of a reasonable royalty for no longer than the period of time the use could have been prohibited" pursuant to the provisions of the California Uniform Trade Secrets Act. Cal. Civ. P. § 3426.3(b). A reasonable royalty is also available under the Defend Against Trade Secrets Act. 18 U.S.C. § 1836(b)(3)(A)(iii) ("in lieu of damages measured by any other methods, the damages caused by the misappropriation measured by imposition of liability for a reasonable royalty for the misappropriator's unauthorized disclosure or use of the trade secret").

Waymo's damages expert will analyze and compute the amount of reasonable royalty damages payable to Waymo by Defendants due to the misappropriation of the trade secrets based

on the documents and information produced by Waymo, Defendants and third parties during discovery, as well as independent research conducted by Waymo's damages expert. Specifically, Waymo's expert will, among other things, opine as to the appropriate reasonable royalty, either in the form of a lump sum payment or a running royalty rate, or a combination of both.

As discussed above, Defendants have not yet responded to Waymo's damages-related discovery requests. Therefore, Waymo's expert has not concluded his analysis and is not expected to do so until the time that expert reports are due on August 24, 2017.

At present, Waymo anticipates that its expert's computations of a reasonable royalty adequate to compensate for Defendants' infringement will involve an analytical approach and/or a hypothetical negotiation approach. An analytical approach is used to determine a royalty that leaves the infringer with a "normal" rate of return for the use of its products embodying the trade secrets or to calculate a royalty based on the increased profitability due to the use of the trade secrets in Defendants' products. In other words, an analytical approach will determine, or isolate, the financial benefit or value that Defendants obtained through their misappropriation of trade secrets.

Waymo anticipates that its expert's determination of reasonable royalty damages under an analytical approach or a hypothetical negotiation approach will be based on, among other things, analysis of sales and profit projections, analyst forecasts, profitability information and other documents and records produced by Waymo, Defendants, and third parties. In addition to the foregoing, Waymo's expert may utilize documents and materials referred to and recognized as relevant to the determination of the cost savings achieved by the Defendants due to their misappropriation. In addition to the foregoing, Waymo's expert may utilize documents and materials referred to and recognized as relevant to the determination of a reasonable royalty or other damages computations in cases such as Georgia- Pacific, among others.

At present, Waymo's understanding of the primary considerations that Waymo's expert will analyze with respect to the hypothetical negotiation approach are summarized below.

Impact on Waymo's future expected profits - Waymo expects that its future success is critically dependent on its technological lead in autonomous vehicles. (WAYMO-UBER-

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WAYMO'S FIRST SUPP. OBJECTIONS AND RESPONSES TO OT'S FIRST SET OF INTERROGATORIES (Nos. 1-14)

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00004108-131 at '109, '111; Chu Tr. 12:3-7, 45:19-24) Defendants' misappropriation of						
Waymo's trade secrets shortens the technological lead that Waymo has in autonomous vehicles.						
For example, when considering the acquisition of Ottomotto and Otto Trucking, Uber estimated						
that Otto's technology could shorten its autonomous vehicle timeline by one to two years.						
(UBER00069030-033 at '033.) Moreover, if Uber does not exercise its Call Option with respect						
to Otto Trucking, yet another Waymo competitor will have had the benefit of Waymo's						
misappropriated trade secrets. Given the importance of Waymo's technological lead, this would						
likely have a significant impact on its ability to earn profits.						

Waymo's policy to protect and maintain its trade secrets – Waymo has sought to protect its trade secrets and has not disclosed the trade secrets to third parties, and it has not licensed its trade secrets. Waymo takes robust measures to protect its LiDAR trade secrets. As a condition of employment, Waymo requires all employees to enter into written agreements to maintain the confidentiality of proprietary and trade secret information, and not to misuse such information. Waymo also enforces an employee code of conduct that explains employees' strict obligations to maintain the secrecy of confidential information, and requires employee training in security procedures. Droz Decl. ¶ 30.

Waymo also takes reasonable measures to mark confidential and proprietary information, such as documents and other materials, with visible legends designating them as such when sharing them outside of Waymo, subject to NDAs or other confidentiality agreements. Disclosures to vendors are limited to the subject matter necessary for the vendor's engagement and do not reveal the entirety of a given LiDAR system or design. Waymo employs reasonable efforts to secure physical facilities by restricting access and employing locks, cameras, guards, and other security measures. *Id.* ¶¶ 33-37; Janosko Decl. ¶ 22.

Waymo uses Subversion (SVN) — a revision control system — to store its electrical design information. All traffic (both ingress to and egress from) the SVN repository is encrypted. All traffic is authenticated against a list of authorized users before access to the repository is granted, and users do not share credentials — all accesses are unique to specific users. Access control lists are audited monthly and stale users are aggressively purged. The SVN server is

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password protected and accessible through specialized software. <i>Id.</i> ¶¶ 23-25. Additionally,					
Waymo imposes network security measures and access policies that restrict the access and					
dissemination of certain confidential and proprietary trade secret information to only teams that					
are working on projects related to that information. For example, Google employees working on					
projects with no relation to Waymo or self-driving cars could not (and cannot) access Waymo's					
confidential and proprietary schematics. They are distributed on a "need to know" basis. Droz					
Decl. ¶ 32. Google's networks generally are also secured through Network Access Control					
("NAC") procedures, Access Control Lists ("ACLs"), and restricted access privileges. Janosko					
Decl. ¶¶ 13-16.					

Google employs a variety of security mechanisms to prevent network intruders or attackers who may compromise Waymo's trade secret information. Google also secures employees' devices and credentials against attacks through monitoring and logging practices, as well as regular security updates. *Id.* ¶ 7-12, 20.

Google secures its production infrastructure in progressive layers starting from the physical security of data centers, continuing on to the security of the hardware and software that underlie the infrastructure, and finally, the technical constraints and processes in place to support operational security. Google employs many hundreds of engineers dedicated to security and privacy distributed across all of Google, including many who are recognized industry authorities. These engineers work to protect Google's production servers from malware utilizing tools such as binary verification. Google also has an incident management process for security events that may affect the confidentiality, integrity, or availability of systems or data *Id.* ¶¶ 17-21.

Waymo incorporates by reference its Response to Interrogatory No. 7 and all supplements thereto.

Competitive relationship between Waymo and Uber and Otto Trucking – Waymo recognizes that Uber is the most significant competitor in the transportation as a service (TaaS) business. (WAYMO-UBER-00004175-194 at '184-185) Similarly, Uber recognizes Waymo is a significant competitor. In fact, as discussed above, Uber has described Waymo as an existential threat to its TAAS business: "This war for self-driving is truly existential for Uber: we'll either

start up our second S curve of growth or we'll die." (UBER00070108-110 at '108.) Internal Uber documents indicate that Uber believes it is in intense competition with Waymo: Discussing the competition with Google, Mr. Holden discusses the battle and the war: "The *battle* is about what we need to do to get ourselves into a sufficiently competitive position before December that G doesn't walk away with the crown for future of ride sharing. It's about establishing beach heads, being in the game in a credible way. The *war* is the long-term defeat of G and others so we afford ourselves the opportunity to extend our massive scale business into the future. This will be about who gets NSD self-driving to scale first." (UBER00070108-110 at '108.) If Uber does not exercise its Call Option with respect to Otto Trucking, Waymo will be facing two competitors who have had the benefit of Waymo's trade secrets.

Development cost savings to Uber – As discussed in more detail above, Uber has likely realized significant cost savings in terms of its development timeline. While considering the acquisition of Otto, Uber recognized one important benefit was that the acquisition "decreases total investment in [Autonomous Vehicle] development." (UBER00068983) An Uber email estimates that Uber's acquisition of Otto saved Uber at least a year in the race to large scale autonomous vehicle deployment, and describes Uber's next best choice as building the team internally with a two to four year lag versus what the Otto team would bring. (UBER00060147-156 at '147.) One way to measure the costs that Defendants saved through their misappropriation of Waymo's trade secrets is by looking at the costs that Waymo incurred to develop those trade secrets. As discussed in Waymo's response to interrogatory 6, Waymo has incurred up to \$1.1 billion to develop the trade secrets. (See Waymo's 7/13 Supplemental Response to Interrogatory No. 6 and all supplements thereto.)

Increased future expected profits to Uber and/or Otto Trucking – As discussed above in the unjust enrichment section, Uber expected that acquiring Ottomotto and Otto Trucking would accelerate the development of its LiDAR technology, and under its "most conservative case," Uber estimated the increased present value of incremental profit would be between \$836 million and \$1.69 billion. (UBER00069030-033 at '033.)

LiDAR system cost savings - Waymo has obtained significant cost savings by developing						
custom, in-house LiDAR systems using its trade secrets, and Waymo expects that by						
misappropriating Waymo's trade secrets, Defendants will be able to obtain similar results.						
Waymo's custom, in-house solution is much cheaper than options offered by third party vendors;						
as explained in more detail above and in Waymo's response to Interrogatory No. 6, a mid-range						
LiDAR from Velodyne costs approximately \$70,000. By contrast, the materials needed for						
Waymo's own mid-range GBr3 LiDAR system, which uses the trade secrets at issue in this case,						
cost just over \$5,000. (See Waymo's Response to Interrogatory No. 6 and all supplements						
thereto.) Uber has also recently purchased third-party LiDAR units from						
each. (UBER00086529.)						

Due to the misappropriation of Waymo's trade secrets, Defendants will likely benefit from many years of future cost savings due to employing Waymo's trade secrets in Uber's LiDAR systems. While considering the acquisition of Otto, Uber itself recognized the significant cost savings from building custom lasers, noting savings of "up to \$45M of one-time savings (@ 1,000 units)" and "up to \$80M per year of ongoing savings (@ 1,000 units)." (UBER00068983.) And it is clear that Uber is scaling production quickly: at the end of 2016, Uber estimated that it would need approximately 120,000 to 150,000 lenses for 2017 and 500,000 for 2018. (UBER00054959-962 at '959.) Since Uber's LiDAR system uses 64 lenses, these estimates indicate that Uber is planning to manufacture between 1,875 and 2,344 LiDAR systems in 2017, and 7,812 LiDAR systems in 2018.

In addition, if Uber is able to deploy autonomous vehicles in its fleet, its operational costs for its ridesharing business would likely drop substantially, in part because it would not have to share any revenue with its drivers.

Valuation of Uber's acquisition – As discussed above, Waymo is still obtaining discovery regarding Uber's internal valuation of Otto. However, Nina Qi testified that the Board was told the overall value of the deal at the time was about \$590 million. (Qi Tr. at 100-103.)

Unjust Enrichment / Reasonable Royalty Related To Otto Trucking's Use Of Waymo's

Trade Secrets (Separate From Its Acquisition And Disclosure Of Those Trade Secrets To

Ottomotto and Uber)

Otto Trucking is also separately liable for damages with respect to its own use of Waymo's trade secrets, including through its subsidiary Otto Transport, which currently operates trucks for the benefit of Uber's freight program. (OTTOTRUCKING00002750.) Discovery is ongoing regarding the use of Waymo's trade secrets by Otto Trucking and its subsidiaries pending the completion of the acquisition by Uber. Waymo's technical expert is continuing to assess Defendants' use of Waymo's trade secrets; such assessments will ultimately inform the damages analysis in this case. Moreover, Defendants have not yet responded to Waymo's damages-related discovery requests. Therefore, Waymo's expert has not concluded his analysis and is not expected to do so until the time that expert reports are due on August 24, 2017.

Punitive Damages, Attorneys Costs and Fees –

Defendants' trade secret misappropriation has been willful and malicious. If willful and malicious trade secret misappropriation exists, both CUTSA and DTSA allow punitive damages up to two times any damages award. *See* Cal. Civil Code Section § 3426.3 *and* 18 U.S.C. § 1836(b)(3)(C). If willful and malicious misappropriation exists, CUTSA and DTSA also allow recovery of attorneys' fees and costs. *See* § 3426.4 *and* 18 U.S.C. § 1836(b)(3)(D). In addition to attorneys' fees, Waymo is also eligible to receive reasonable expert fees under CUTSA. § 3426.4.

While discovery is not complete and Waymo has still not seen the Stroz due diligence report (which Waymo expects will bear on this issue), the evidence to date indicates that Uber and Anthony Levandowski were in league with one another to port Waymo's trade secrets to Uber going as far back as May 2015. (Dkt. 712, Ex. 1 (logging discussions between Uber and Mr. Levandowski beginning on May 20, 2015 "wherein Anthony Levandowski mentioned LiDAR to any officer, director, employee, agent, supplier, or consultant of defendants").) Uber continued to meet with Mr. Levandowski throughout the fall of 2015. (Dkt. 712, Ex. 1 (logging five meetings with Mr. Levandowski regarding LiDAR between October 2015 and December 11, 2015).) Uber met with Mr. Levandowski to discuss LiDAR on the very same day that he downloaded 14,000

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proprietary files from Waymo servers, (Dkt. 712 Ex. 1; Dkt. 23, ¶ 44), and again a few weeks later
on the same day Mr. Levandowski downloaded additional proprietary information from Waymo.
(Ex. 263; Dkt. 24-2 ¶ 22.)

When Uber began meeting with Otto, Otto did not have any products. (Qi Tr. 146:8-18.) Instead, Uber acquired Mr. Levandowski's company because of its "[e]xperience w/ automotive efforts of competitors":

Anthony and his close team have developed several generations of mid and long range laser that we now believe is critical to AV autonomy (day and night). Not only do they have the several generations of experience but also know how to improve on the next gen devices that they would build for us. We have yet to find anyone else in the world with this know-how. . . . Second, just rubbing shoulders with this team and having them advise us all over AV has a decent chance of saving Uber at least a year off of the race to large scale AV deployment. . . . My point is that there is more value here (considerable) than 25 disparate engineers that we would pick up from 25 different places. This is a team that knows each other knows the tech, knows the potholes and can jam at incredible rate (we hope) to help solve some of our most pressing challenges.

(Ex. 271 at 1.) While Mr. Bares refers to the "team" that Mr. Levandowski was going to bring to his new company, there was no team in place other than Mr. Levandowski and Mr. Ron at the time of this email.

Given Uber's scheme to buy Waymo's "tech" and "know how" through Mr. Levandowski (and the corporate entities Ottomotto and Otto Trucking), Uber began anticipating litigation with Waymo almost immediately. The day after Mr. Levandowski resigned from Waymo, Uber was already discussing indemnity with Mr. Levandowski and Lior Ron. (Ex. 277, January 28, 2016 email from Cameron Poetzscher asking Travis Kalanick, "[d]id you tell Anthony that you would indemnify them if they get sued by G as part of or after the deal? They're under that impression.") By February 5, 2016, the parties were specifically discussing indemnity for "Bad Acts," *including* "downloading of files of [Google]." (UBER00017265 at -73, Email between Uber representatives and Lior Ron discussing "Timing of Indemnity / Closing Conditions," and an "Example list of Specified Bad Acts," which included "downloading of files of [Google]".)

Having agreed to indemnify Mr. Levandowski for "downloading of files of [Google]" and having agreed to indemnify Ottomotto and Otto Trucking for Bad Acts including trade secret misappropriation, Uber then set up a forensic due diligence investigation designed specifically to

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uncover – or confirm – the downloaded Waymo files in Otto's or Mr. Levandowski's possession. The existence and sheer scope of this investigation is proof enough that Uber knew Mr. Levandowski had Waymo materials: it was, and remains, a process that was unprecedented for Uber. (Poetzscher Tr. at 128:11-25; Qi Rough Tr. at 243:17-244:3.) As part of the investigation, Stroz took and analyzed the electronic devices of five different Otto employees, including both their personal and work devices. (*See* Ron Tr. at 96:3-19.) Despite this, the Uber witnesses responsible for overseeing the investigation testified that the diligenced employees did not seem upset by the scope of the investigation that Uber requested; instead, they were "okay with it." (Qi Rough Tr. at 223:22-224:6.) The most likely explanation for that is, of course, that all parties already knew what Uber was looking for—stolen Waymo files.

Although Uber must have known about the downloaded files when it agreed to indemnify Mr. Levandowski and set up the forensic investigation, Uber almost certainly found out that Mr. Mr. Levandowski had downloaded materials when the diligence process got underway. To motivate Mr. Levandowski to disclose *all* of his "Bad Acts" to Stroz, Uber created an elaborate incentive structure: as long as Mr. Levandowski disclosed his "Bad Acts" (including "downloading of files of [Google]") to Stroz, Uber would indemnify him. (UBER00017265 at -73-74; Dkt. 566 at 3.) If Mr. Levandowski did not disclose "Bad Acts" to Stroz, Levandowski could not seek indemnification from Uber for those "Bad Acts" later. (*Id.*) Although Waymo has still not seen the due diligence report that Stroz produced, all evidence indicates that Mr. Levandowski accepted this offer and disclosed the existence of the stolen information to Uber and Stroz. Defendants have never disputed that Stroz has some of the stolen information in its possession as a result of the due diligence process, and Uber recently admitted that its lawyers have also possessed the stolen information for over a year by virtue of their involvement in the due diligence process. (Dkt. 677-8.)

At the very latest, Uber learned that Mr. Levandowski had downloaded Waymo materials in his possession on March 11, 2016 when Mr. Levandowski told Uber outright. As Uber has explained: "On or about March 11, 2016, Mr. Levandowski reported to [Travis] Kalanick, Nina Qi and Cameron Poetzscher at Uber as well as Lior Ron that he had identified five discs in his

possession containing Google information." (Dkt. 695 at 4.) Uber's accounting indicates that Mr.						
Levandowski and Mr. Kalanick had a meeting to discuss LIDAR on the same day. (Dkt. 712, Ex.						
1 at No. 63.) Since receiving this interrogatory response, Waymo has deposed three of the four						
individuals to whom Mr. Levandowski made this admission, and all three confirmed that Mr.						
Levandowski did indeed reveal that he had Google "stuff" in his possession during an in-person						
meeting with Uber on March 11, 2016. (Ron Tr., 25:23-26:18; Poetzscher Tr., 249:3-250:9; Qi						
Rough Tr., 271:11-273:20.) Uber now insists that Mr. Levandowski subsequently destroyed the						
materials (raising other serious concerns, including concerns regarding the integrity of Stroz's						
investigation), but the point remains: Uber was aware of Mr. Levandowski taking confidential						
Waymo information files as of March 11, 2016, and Uber acquired Mr. Levandowski's company						
anyway. And even after finding out that he had Waymo materials in his possession on March 11,						
2016, Uber never took any steps to prohibit Mr. Levandowski from using his "treasure trove of						
files" in his work at Uber.						

Waymo also seeks prejudgment interest on the damages awarded for the misappropriation of trade secrets at the California statutory prejudgment interest rate of seven percent (7%).

INTERROGATORY NO. 11:

Identify all facts supporting your contention that Waymo owns each of the alleged trade secrets identified in Waymo's 2019 Disclosure.

RESPONSE TO INTERROGATORY NO. 11:

Waymo incorporates by reference its General Objections. Waymo further objects to this interrogatory on the grounds that it is overbroad, unduly burdensome, and oppressive, including to the extent that it asks Waymo to "identify all facts." Waymo further objects to this request to the extent it is compound, complex, and contains multiple subparts.

Subject to and without waiving the foregoing General and Specific Objections, Waymo responds as follows:

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1	DATED: July 25, 2017	QUINN EMANUEL UI LLP	RQUHART & SULLIVAN,	
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3	By /s/ Charles K. Verhoeven Charles K. Verhoeven			
4		Attorneys for WA	YMO LLC	
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